Greetings from the Chair

This past academic year saw significant changes to the KSU Geology Community with the retirements of Drs. Ernie Carlson (42 years) and Dick Heimlich (48 years). We thank Ernie and Dick for their many years of service to the Department and wish them well. They are both 'hanging around’ the department, dabbling in their various interests, and enjoying not having to attend faculty and committee meetings! Please feel free to send them an e-note and reminisce with them. I’m sure they would enjoy hearing from you.

I am very pleased to welcome Dr. Elizabeth Griffith (Stanford Ph.D., ‘08) who joined the faculty in January as an Assistant Professor in the area of low-temperature Hydrogeochemistry. Liz is teaching Hydrogeochemistry this spring and developing a new Stable Isotope Geology course to be offered fall, 2010. Lab renovations for her research program are currently underway.

At the annual Geology Banquet in April, 2009, the Department gave $18,000 in tuition scholarships and awards in support of student research to juniors, seniors, and graduate students. The Department Scholarship recipients and recipients of scholarships and awards given out by our student-run organizations (KSGS, KSAEG, and SGE) are listed in this Newsletter.

We want to thank those who have supported us through generous contributions, many of which directly benefit our students via endowed scholarships. We are delighted that Geology alumni and friends contributed close to $19,000 in donations to the Department in 2008 and again in 2009. Your continued support is crucial. Thank you!

Our department saw a significant increase in enrollment from last year to this year, such that we are offering two sections of Petrology lab this semester. One likely reason is the revamped requirements of our B.S. degree that went into effect this academic year. The number of credits required within this major is now on par with the other science B.S. majors at KSU; and we now offer our own course on statistics (taught presently by Donna Witter), which focuses on geologic examples of interest to our students. Another reason may be the recruiting efforts of faculty, graduate students, and undergraduates. Events such as “Geology Night” and the Geology Open House during Homecoming Weekend increase awareness of Geology as a major. Additionally, our faculty and graduate students continue to improve their teaching and connectivity with students in our introductory courses.

Karen Smith was recognized last summer for 25 years of service, all in the Department of Geology. In the fall she was promoted to Senior Secretary, a deserving title for an important individual who is so helpful to us all. We encourage you to stop in and visit us during homecoming or anytime. Our Geology Banquet this spring will be held Thursday evening, April 29th in Kent. In our last Newsletter (Nov. 2008) I mentioned the GSA Regional meeting to be held in Pittsburgh 2011 (March 20-23). Our department is co-hosting that meeting and we will be having an alumni gathering there. Please mark those dates on your calendars.

Sincerely,

Daniel K. Holm,
Professor & Chair
M.S. Theses Completed (2008-2009 AY)

Fein, Elizabeth, Flow fabric determination of two Mesoproterozoic midcontinent rift dike swarms, northeastern Minnesota. (Holm)

Frantescu, Ovidiu, Brachyuran decapods (including five new species and one new genus) from Jurassic (Oxfordian-Kimmeridgian) coral reef limestones from Dobrogea, Romania. (Feldmann)

Ghosh, Amiya, Reconnaissance U-Pb Geochronology of Precambrian Crystalline Rocks in the Northern Black Hills, South Dakota: Implications for Regional Tectonics (Dahl)

Griffin, Jason A., Development of a Rating Classification for Rock to be Used as Toe-Bench Material (Shakoor)

Hark, Jessica, Zircon, monazite, and xenotime as provenance indicators in key Precambrian crystalline rocks, Black Hills uplift, South Dakota (Dahl)

Jones, Carson L., U-Pb Geochronology of Monazite and Zircon in Precambrian Metamorphic Rocks from the Ruby Range, SW Montana: Deciphering Geological Events that Shaped the NW Wyoming Province (Dahl)

Robins, Cristina, Systematics of the Late Jurassic members of the superfamily Galatheoidea Samouelle, 1819, from the Ernstbrunn Limestone of Ernstbrunn, Austria. (Feldmann)

Vlack, Yvette, A Diffuse Spectral Reflectance Library of Clay Minerals and Clay Mixtures within the VIS/NIR Bands. (Ortiz)

Weghorst (Schwenk), Pamela L., Modis Algorithm Assessment and Principal Component Analysis of Chlorophyll Concentration in Lake Erie. (Witter)

Woodward, Stephen, Carbonate Sediment Deposition in the Village of Titiana from the Solomon Islands Tsunami of April 2, 2007 (Ortiz)

Wendlandt, Nichole, A. Geotechnical Evaluation of the Launched Soil-Nailing Method of Landslide Stabilization in Summit County, Ohio (Shakoor)

2009 Geology Scholarship Awardees

Amoco Alumni Scholarship: Kay Amey, Jessica Hark
Geology Field Camp Scholarships: Jon Wheatley, Mike Farinacci, Jamael Sadallah
Emerald Environmental Field Camp Scholarship: Kyle Rote
Richard A. Heimlich Field Camp Scholarship: Tara Jonell
John Allan Clark Scholarship: Jon Wheatley
Donald C. Gifford Geology Scholarship: Greg Logan
Glenn Frank Scholarships: Carrie Frisky, Kristen Mulholland
Katherine L. Moulton Research Scholarship: Pradeep Nalaka Ranasinghe
School of Hard Rocks Research Award: Jenna Hojnowski

KSGS Field Camp Scholarships: Jon Wheatley, Mike Farinacci, Tara Jonell, Jamael Sadallah

SGE Field Camp Scholarships: Jamael Sadallah, Tara Jonell, John Wheatley, Mike Farinacci
SGE Research Scholarships: Natalie Cope, Nalaka Ranasinghe, Jenna Hojnowski, Jessica Hark
SGE W.A. Tarr Award: Natalie Cope
AAPG Visiting Geologist

Last fall, Larry Wickstrom visited our department under the auspices of the AAPG Visiting Geoscientists Program. Larry received both his B.S. and M.S. degrees in geology from Kent State University and has been a geologist with the Ohio Geological Survey since 1983. In February 2007, Larry was appointed Division Chief and State Geologist of Ohio. Larry has been principal investigator and/or project manager on many research grants from the U.S. Department of Energy, U.S.G.S., U.S. EPA, industry consortia, and others. He has been involved with geologic CO₂ sequestration for over ten years, managing multiple projects and partnerships, keeping Ohio and the Survey at the forefront of this research. During his visit, Larry gave an excellent presentation on “Geologic CO₂ sequestration in Ohio”, visited with our Mineralogy students and met with both undergraduates and graduate students. One immediate outcome of his visit is the formation of an AAPG Student Chapter in our Department.

Visiting Scholar

Dr. Silvio Casadio is in Kent for a two month visit to continue collaboration with Drs. Feldmann and Schweitzer that began in 1993. Silvio is a member of the Facultad de Ciencias Exactas y Naturales, Universidad Nacional de La Pampa, Argentina, and a scientist with CONICET, the Argentine equivalent of the NSF. He is an expert on fossil mollusks, particularly oysters, and has conducted field work in Patagonia, Antarctica, and New Zealand. The Kent/La Pampa collaboration began with studies in southernmost Patagonia, in 1993, and has continued since then so that we have examined nearly every Cenozoic exposure in Argentina. Currently, we are completing work on the paleobiogeography of fossil crabs in southern South America. Silvio's comprehensive knowledge of the geologic history of the area and the molluscan fauna is coupled with our work on the crabs to produce a paper to be published in Annals of Carnegie Museum. When Silvio and his family return to Argentina, he will be leaving the university to begin an entirely new, innovative department of geology in a new university in General Roca, Rio Negro Province.

New Undergraduate Endowed Geology Scholarship

We are grateful to alumna Dr. Anne Tucker for establishing an endowed grant for Geology students in honor of her parents. The Edward E. and Margaret M. Bauer Experiential Learning Grant will enable us to continue focusing on and supporting experiential learning for our students. Experiential learning is fundamental to Geology education and historically it has been considered an important aspect of what we do here in our department. Unfortunately, the national trend in higher education is to place less emphasis on field experiences and field observational skills. We, on the other hand, continue to place a premium on giving our students many opportunities to learn from direct observations in the field, whether it be via our many class fieldtrips, our capstone field course in the Black Hills and western U.S, or through individual field education and research opportunities.

Here’s what Carrie Frisky, one of our current seniors, wrote about her field experience in Kamchatka last summer. “Studying volcanoes in Kamchatka was unforgettable in many ways. I remember eating our lunch in a fumarole field, and having a lecture at the caldera rim of Mutnovsky. Hiking daily with students from around the world, I was able to learn and share ideas and experiences that are unattainable elsewhere. Overall, if there is ever a chance to learn about geology in the field, it’s worth it”. Please take a moment to check out the fresh-faced geology website for more student testimonials in this year’s “Undergrad Geo News” (www.kent.edu/Geology/studentorgs.cfm).
The Department of Geology is mourning the death of Dr. Ksenija Namjesnik-Dejanovic who died August 29, 2009 after a long battle with breast cancer. She was a research specialist in water chemistry and natural organic material and served as a teacher and post-doctoral fellow in the Department of Geology over many years. She was born March 5, 1965, in the Republic of Croatia and studied at the University of Zagreb in Croatia, receiving a B.S. with Honors in Geology in 1989 and an MS in Geochemistry in 1994. She came to Kent State University where she studied aqueous geochemistry in the Department of Geology, receiving her Ph.D. in 1999. She received two post-doctoral fellowships in chemistry and geology, working with Dr. Steve Cabaniss (now at the University of New Mexico) and Dr. Patricia Maurice (now at Notre Dame University).

While serving as a research scientist, she also taught LER courses and advanced and graduate courses in Hydrology and Hydrogeochemistry, receiving several teaching awards. Ksenija was the author of numerous publications on organic substances, water quality, and soil contamination problems. Ksenija was helpful to many of the students in Geology, Biological Sciences, and Chemistry with respect to instrumental analysis using our analytical laboratory equipment. She was an outstanding member of the Department serving on graduate panels and Ph.D. committees for students in Geology and Biological Sciences.

Ksenija was a joyful person who loved to share her knowledge and her enthusiasm for learning. She also loved to cook and was an avid organic gardener, and many of us will always remember the wonderful home-baked treats she would bring in, and the many gifts of newly harvested vegetables and fresh laid eggs from her own hens. She lived a full life, surrounded by family and friends, and we will miss her every day. She is survived by her husband Mijo, her son Ante, her parents, and many friends and family, all of whom were enriched by her love of life, her faith, and her personal strength in facing her illness.

A ginkgo biloba tree was planted outside of McGilvrey Hall (Rm. 240) in November in honor and in memory of Ksenija. An honorary memorial session for Ksenija will be held at the International Humic Sciences and Technology Conference at Northeastern University in Boston on March 17-19, 2010.

Donald Palmer
Ernest Carlson

Two events have changed my situation markedly within the geology department, I had major heart surgery in early January at the Cleveland Clinic, and I retired effective June 30, 2009. The heart surgery was done to replace the valve to the aorta, and I stopped teaching in January. My course in gemstone identification and precious metals was taken over by Professor Palmer who, I understand, did an excellent job. My recovery has been slow and I still suffer from shortness of breath. I attend rehabilitation classes three days weekly at Robinson Memorial Hospital, which involves exercises on the treadmill, bicycle, and other “dangerous” machines. Surgery has slowed progress on the revision of Minerals of Ohio although I have more time to spend on it. I’m hoping now to finish the revision sometime this year.

Retirement has taken me out of teaching entirely. The recession has closed several rock quarries this year and has put the cramps on my job as field trip chairman for the Friends of Mineralogy. We traveled to Junction, Paulding County; Huntsville, Logan County; West Branch of the Huron River, Huron County; and Salem, Indiana; upcoming trips are planned for Corydon and Indianapolis in Indiana.

Recently published is an article on mineralogy and paragenesis of large dolostone concretions in north-central Ohio that was coauthored by myself, Paul Schwin, and Ksenija Namjesnik-Dejanovic, appearing in Rocks and Minerals. Merida Keatts recently made extensive changes to the computer system that operates KSUO, our seismic station that is part of the state-wide network for OHIOSEIS. My wife, Ruth, continues to be healthy and accompanies me on all my field trips. Our two children are both married and doing fine. Our daughter has three fine children, and our son recently surprised us with a granddaughter.

Pete Dahl

Once again this past year I have enjoyed teaching Earth History, Principles of Geochemistry, and Optical Petrography, while also supervising the Earth Dynamics labs. In addition, I had a busy year collaborating on Wyoming craton research with my latest crop of Masters students – Amiya Ghosh, Clayton Loehn (Virginia Tech), and Jessica Hark – all of whom graduated in 2009. As part of her research, Jessica and I traveled to the ion microprobe facility at Stanford University. There she was able to pinpoint the timing and duration of the Harney Peak magmatic event (Black Hills, SD) – a longstanding research goal of mine – while her advisor partook of the many culinary delights at the nearby Peninsula Fountain and Grill. Still on the research front, I second-authored a Precambrian Research paper on the origin and timing of the famous Homestake gold deposit, which during its 125-year life produced 10% of the gold ever mined in the USA, and coauthored another paper on hydrogeochemical signatures of tectonically-controlled deep-groundwater circulation in the Himalayan foreland basin (Pakistan). Also, I collaborated on a still-pending Earthscope proposal to the National Science Foundation; herein, we propose to image and characterize deep-crustal structures in the western North American mid-continent. Lastly, this fall I completed an extended term as an Associate Editor of American Mineralogist.

On the home front, my 22-year-old daughter Elena graduated with honors from College of Wooster and is currently working as an Americorps volunteer for a year before going on to graduate school next fall. Some may remember her as the saucy 9-year-old who, at a departmental Christmas party, once delighted geology students (and herself) by slapping a creme pie into her dad’s face. This past summer, my wife Susie (KSU ’73) and I went on a memorable two-week trip to Greece, where we visited classical Greco-Roman sites both on the mainland and on several islands.

Finally, I will officially retire from my KSU post in June 2010, after 35.5 years of Ohio service. Subsequently, I intend to spend much of my new-found spare time on professional writing interspersed with personal travel.

If you haven’t visited the Alumni Webpage lately, you’re missing a lot! There are lots of new photos and news items from recent grads and those with a bit more experience to share. Please contact Daniel Holm (dholm@kent.edu), Richard Heimlich (rheimlic@kent.edu), or David Waugh (dwaugh@kent.edu) if you’d like to see something added to our Alumni Webpage.
Liz Griffith

I’m delighted to be here! I am presently teaching 17 students in Hydrogeochemistry, writing papers and proposals, and overseeing renovations of my new lab space. For the past year and a half I was a research fellow at University of California Santa Cruz in the Institute of Marine Sciences with specialties in isotope geochemistry, marine biogeochemistry, and paleoceanography. My research uses experimental and observational data in the modern marine environment and measurements on ancient samples to test our understanding of calcium cycling in the ocean. I completed my Ph.D. in 2008 at Stanford University and published a record in Science of seawater calcium isotope ratio variations over the past 28 million years. This record revealed distinct features in the evolution of the seawater calcium corresponding to global change in the carbon cycle, suggesting that the ocean's chemical makeup is less stable and more greatly affected by climate change than previously believed.

With a background in geology from the Missouri University of Science and Technology (formerly the University of Missouri-Rolla), I worked as a wireline field engineer for Schlumberger both in Bakersfield, California and Aberdeen, Scotland for two years before pursuing a Ph.D. at Stanford. I spend my time outside of the lab and away from the mass spec discovering the simple pleasures of life with my husband and 1½ year old daughter Helen, cooking, gardening, and planning my next marathon.

Visit our website at http://www.kent.edu/geology

Yoram Eckstein

“I’m still standing – yeah! yeah! yeah!” after all these years Hydrogeology is – again - alive and striving at KSU! After long “lean” years classes in Advanced Hydrogeology (including exercises with MODFLOW) and Contaminant Hydrogeology are on again. With help of the funds from the University Research Council and the University Teaching Council we have acquired comprehensive hydrochemical graphing and interpretation software AQUACHEM 5.1 and TOUGHREACT2 the latest in modeling flow, heat and reactive chemical transport through porous media. We are still trying to find funds to update our shamefully outdated GMS 3.1 to the latest version GMS 7. We have currently two new MS candidates (one of them aims to continue to Ph.D.) and the applications from new grad students are pouring in.

TOUGHREACT2 was immediately applied in the project of Dr. Yanjun Zhang, who came here to work with me during a 12-month post-doc research through 2008/09. He is now back at his university in China completing our paper on flow and heat transport between extraction and injection wells in a typical heat pump system.

There are two new possible candidates for post doc research arriving here during 2010-2011; one from the University of Addis Ababa, Ethiopia, who is applying for Fulbright scholarship to model the hydrogeology of the East African Rift, and the other one from the University El-Shams, Egypt, is applying for funds from the Egyptian Science Foundation to work on the Nubian Sandstone aquifer of the Western Desert.

Here in Ohio, a driller messed up gas drilling project (never a dull moment) and caused penetration of natural gas into a shallow phreatic aquifer. It was fun (but not to the residents with the affected water wells; one of the homes exploded; luckily no one was bodily hurt, but the property values in the neighborhood went down the drain) to watch with the down-hole TV camera gas bubbles getting into the well space from all the nooks and crannies in the fractured Cuyahoga Shale formation. What a way to enhance aquifer hydraulic conductivity! Awesome!!! Once the case will get out of the adversary environment of the courts of justice it may turn a nice thesis or even dissertation topic. Well – things are looking up for the next “hydrogeological year” at KSU.

Cheers, YE
David Hacker

It has been another busy and productive year of teaching and research. This past year I instructed over 370 students in a wide range of courses and labs (Earth Dynamics, Earth History, Earth Dynamics Lab, Earth History Lab, Oceanography, Geology of National Parks—with a field component at Cuyahoga Valley NP, Introductory Hydrogeology, and Summer Field Camp). During Field Camp we spent over three weeks at our field station (a.k.a., Black Hills State University) studying the geology of the Black Hills and constructing and interpreting geologic maps and cross-sections. The weather was very mild this year which made field mapping exercises more enjoyable. This was followed by a week long traveling field component that explored the regional geology of a portion of the western Cordillera within and between Yellowstone and Grand Teton National Parks (WY), and Craters of the Moon National Monument (ID).

Following Field Camp, I spent the rest of the summer in the Pine Valley Mountains of Utah conducting field research on magma emplacement in laccoliths and calderas. The Miocene laccoliths I am studying were emplaced rapidly and vented pyroclastic ash flows similar to caldera eruptions. I am working with colleagues from New Mexico Highlands University (led by Mike Petronics, a Kent State graduate) looking at paleomagnetic signatures of the intrusions and volcanic eruptions to better understand the process and rate of emplacement and growth of these unique features. While I was in Utah, I was able to spend some time with my sons DJ and Jonathan who were working hard as seasonal employees for Dixie National Forest at the Pine Valley Ranger District. I was able to recruit them sometimes on their days off to help collect rock samples.

Rodney Feldmann and Carrie Schweitzer

This has been another busy year. As coordinator of the Earth History labs, Rod has been working with the TAs to produce a laboratory course pack which all the students must purchase. It includes all the exercises and instructions for the labs. We are now in the third edition of the pack and it has really improved instruction in the labs. That, coupled with renovation of the lab, has improved the course, and the students seem to like it very much. The newest addition is the EmRiver, a stream table that helps students understand sediment transport processes.

Meanwhile, at the Stark Campus, Carrie ran field trips to Kelleys Island and to the Carnegie Museum for members of the Geology Club and hosted several speakers. The club continues to be very active and plans are now being hatched for the coming year. Earth Day was celebrated again by several activities sponsored by the Geology Club. They included a mock fossil dig and making plaster of Paris fossil casts (it seemed like thousands of them!)

Work with graduate students continues. There are currently five paleo grad students and all are working on Ph.D. projects related somehow to fossil crabs and lobsters. At one time or another, we have had some pretty terrific experiences. Over the Christmas break, we travelled to Washington DC, Charleston SC, and Jackson MS to study and borrow specimens for their research. We also introduced three European students to real barbeque.

Over Spring Break, we travelled to Argentina where we attempted to collect fossils from some new spots. Although the collecting was not great, we had an opportunity to study the rocks in areas we had not previously visited. The trip was made exciting by having all the fossils we were returning to the country, confiscated by customs officials in Buenos Aires. Exporting fossils from Argentina is prohibited, but returning their fossils .... ?

During the summer, Carrie and I worked in England for three weeks before travelling to Spain to do some field work in the Pyrenees with one of our students. Then on to Barcelona and Vienna for more museum work. The summer ended with a week in Rapid City where we organized the very large collection of decapods donated to the School of Mines by Gale Bishop. Interspersed with the travel, we have published several articles and two book-length publications: a complete list of fossil and extant decapod genera and a complete list of fossil decapod species which appeared in January 2010.

It has been a great year, made even better by drop-in visits by several alums. We hope to see more of you this year.
Daniel Holm

My time this past year was largely consumed by new Chair responsibilities, most of which I never knew existed or don’t recall seeing in the job description. I enjoyed teaching Structural Geology (fall), Tectonics & Orogeny (spring), and a graduate level seminar (spring) last year. In April I took 16 students on an “Odyssey through Orogeny” in the upper Great Lakes region (northern Michigan and northern Wisconsin), and in September I led another fieldtrip to the New England region to study the effects of the Acadian and Taconic orogenies. In December I co-led a pre-AGU EarthScope Midcontinent Lithosphere workshop and in May I found time for a little lab work at the Washington State University, Pullman. Last summer I worked on a couple of manuscripts which are presently migrating their way through the review process and took the family on a canoe trip to the Boundary Waters Canoe Area Wilderness in northern Minnesota.

Joseph Ortiz

I was awarded two NSF grants recently. One, with Mark Abbot at U. Pittsburgh is to study the history of drought in the Pacific NW during the last 2000 years. I spent several weeks in Oregon, Washington, and British Columbia this summer kicking off the field work. The scenery was beautiful, but the mosquitoes were brutal! This summer I also collected water quality samples with Donna Witter & Jen Mou (Biology). The other project is to reconstruct the late Holocene paleoclimate history of the Bering Sea using methodologies I developed while working in the Chukchi Sea on the HOTRAX program. Several of my papers from the HOTRAX program were just featured in a special volume of the Journal of Global and Planetary change.

After several years as a member, and then chair of the graduate studies committee, I have stepped down from that committee to take on other responsibilities both inside and outside of the department. This fall I was appointed to serve on the Ohio Geology Advisory Committee by Governor Ted Strickland. The OGAC provides advice to the director of the Ohio Geology Survey in leading the state mapping program, maintaining the primary repository of geologic data for the Ohio, dealing with issues related to the assessment of geological and coastal hazards, and wise use of Ohio’s natural resources. I also took over as the Geology Internship Coordinator from Dr. Dick Heimlich this fall. I am honored to be selected to serve in this capacity after Dick who has done an outstanding job in his service to the students and department.

Abdul Shakoor

Lately I have been very busy with my ODOT research project dealing with design of cut slopes in Ohio. This is a major research project that will provide the basis for developing a design manual on which Marty Woodard, former graduate of the KSU Engineering Geology program, is working as a consultant. In May of 2009 I was invited by Dr. Paul Marinos, Professor of Engineering Geology at National Technical University of Athens, Greece, to participate in a field trip to various European countries, including Greece, Italy, France, and Switzerland. The purpose of the field trip was to visit sites of major failures of engineering projects or sites which pose major hazards. As a part of this field trip, in which nearly 200 students and many faculty and professionals participated, we had the unique opportunity to visit Venice, Italy, which faces a tremendous problem of flooding and land subsidence; the Vaiont Landslide, Italy, where we looked at the discontinuities that promoted failure; Florence, Italy where we visited the leaning tower of Pisa, recently stabilized using innovative techniques; the site of the Malpasset Dam failure in France to learn about the causes of failure; and a series of highway and tunneling projects in Greece, Italy, and France. This was an extremely educational experience for me in addition to enjoying the beautiful scenery.

This year I have been Chair of the Engineering Geology Division of GSA and continue to serve as Co-Editor of Environmental and Engineering Geoscience journal. The KSU student chapter of AEG has its largest membership this year and continues to participate in a variety of activities, including attending lectures in Pittsburgh organized by the Allegheny-Ohio Section of AEG.

Our Sigma Gamma Epsilon chapter is still making Grain Size Folders!

Contact SGE at 330-672-2680 if you are interested in making a purchase.
I continue to work on projects using ostracodes as paleoclimatic and hydrologic tools in reconstructing Late Pleistocene through Holocene aquatic environmental records. This past spring I had the thrill of giving a talk at Down House (Charles Darwin’s house in Kent, England) during the Micropaleontological Society Spring meeting, and this fall took part in an international Quaternary fossil database workshop in Umeå, Sweden. Current graduate students include Kay Amey (Ph.D. student in Hydrology and Environment, focusing on groundwater-surface water interactions in brook trout-bearing streams of northeast Ohio), Cordelia Dennison-Budak (M.S. student finishing up her Paleolimnology thesis of Plio-Pleistocene Lake Idaho deposits at Hagerman National Monument in Idaho), and Katie Thomas (M.S. student beginning her thesis work on early Holocene non-marine records from Beringia).

The work on version 2 of the North American Non-Marine Ostracode Database (www.kent.edu/NANODE) continues with colleagues Don Palmer and Brandon Curry (Illinois Geological Survey), and we have begun a new initiative on the study of springs in the karst landscape of Ohio, Pennsylvania, and West Virginia with colleagues from Juniata College and West Virginia University.

I continue to work on the Holocene history of the Great Lakes with colleagues from University of Rhode Island, University of Arizona, and the Geological Survey of Canada. This past December EOS published our results of the lake level study on the Great Lakes, showing how Lake Huron reached closed-basin status during the Holocene, dropping about 20 meters in lake level between about 8700 and 8200 calendar years ago (Lewis et al., 2008, EOS, 89, 52, 541-552).

I am continuing to teach invertebrate paleontology, so if you have been carrying around a lot of great fossils you no longer need, or have them stashed in the basement, remember, we always need good fossils for the teaching collection!

I presented my research on the use of satellite technologies for monitoring Lake Erie at annual meetings of the International Association for Great Lakes Research and the American Geophysical Union. Data collection for this research continued last summer, in collaboration with Dr. Ortiz, using ship-time awarded by Ohio Sea Grant/NOAA. I recently published papers in the Journal of Great Lakes Research and the Journal of Geochemical Exploration and continue to serve as Physical Oceanography Secretary for the American Geophysical Union. During spring 2009, I taught the department’s Geophysical Fluid Dynamics course for the first time.

The Department just acquired an Amray 1600 Turbo scanning electron microscope. The instrument was donated to us by RTI International Metals, Inc. (located in Niles, Ohio). The microscope has recently been updated with an EDAX EDS system and a high resolution digital capture system. The EDS system is especially exciting, as it allows students and faculty to make elemental analyses at the micron scale, in addition to plotting chemical maps at similar scales. Although the SEM itself is not new, it has been well maintained, and the recent upgrades make it a thoroughly modern addition to the Department. Last semester the special topics class on taphonomy used the instrument to investigate some fossil-containing concretions.
The KSGS T-shirts, Polos and Hoodies are officially on sale! And all proceeds go to undergraduate scholarships! Visit the Alumni section of our website, or fill out and mail the order form below.

Removable bumper stickers: $1.50 (includes postage)

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Order Form

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